ELSEVIER

Volume 428, Numbers 1–2, 15 May 1997

JOURNAL OF
ELECTROANALYTICAL
CHEMISTRY

Contents

On the transformation of colored random noise by the Kronig–Kramers integral transforms
J.R. Macdonald and V.I. Piterbarg 1

The electrochemical reduction of 1,2-di(4-pyridyl)ethylene in an aqueous medium
A. Vallat, R. Meunier-Prest and E. Laviron 11

SERS of 1,8-diaminonaphthalene on gold, silver and copper electrodes. Polymerisation and complexes formed with the electrode material
B.J. Palys, J. Bukowska and K. Jackowska 19

Investigation of the potential distribution in porous nanocrystalline TiO_2 electrodes by electrolyte electroreflection
G.K. Boschloo, A. Goossens and J. Schoonman 25

Reductive desorption of carboxylic-acid-terminated alkanethiol monolayers from Au(111) surfaces
S.-i. Imabayashi, M. Iida, D. Hobara, Z.Q. Feng, K. Niki and T. Kakiuchi 33

The direct electrochemistry of cytochrome b_5 and its mutant proteins
Y.-H. Wang, J. Cui, Y.-L. Sun, P. Yao, J.-H. Zhuang, Y. Xie and Z.-X. Huang 39

Characterization of thin $CuCo_2O_4$ films prepared by chemical spray pyrolysis. Study of their electrochemical stability by ex situ spectroscopic analysis
J.L. Gautier, E. Trollund, E. Ríos, P. Nkeng and G. Poillerat 47

A new semi-empirical equation that expresses the dependence of transference numbers on the concentration
R. Dorta-Rodríguez, F. Hernández-Luis and M. Barrera-Niebla 57

Indirect routes for electrochemical modification of electrode surfaces by μ-oxo binuclear manganese complexes
M.-N. Collomb Dunand-Sauthier and A. Deronzier 65

Standard electrode reaction rates for Eu^{3+} in *N,N*-dimethylformamide
L. Kišová and G. Gritzner 73

Ion transport in Nafion® 117 membrane
A. Lehmani, P. Turq, M. Périé, J. Périé and J.-P. Simonin 81

Voltammetry of polyprotic acids at platinum microelectrodes: reduction of pyridoxal-5′-phosphate
J.M. Sevilla, T. Pineda, A.J. Román and M. Blázquez 91

Capacitive-free a.c. impedance of polyaniline films by means of magnetically induced current
K. Aoki and J. Cao 97

Oscillation frequency characteristic of an electrode-separated piezoelectric sensor and application to the determination of the adsorption of a surfactant on a quartz surface
D. Shen, Q. Kang, L. Wang, C. Ma and X. Zhang 105

Aluminium underpotential deposition from $AlCl_3$ + NaCl melts on gold electrodes
B.S. Radovic, R.A.H. Edwards and J.N. Jovicevic 113

Electron-transfer reactions across liquid|liquid interfaces
W. Schmickler 123

Long-time and short-time investigation of the electrode interface through electrochemical impedance measurements. Application to adsorption of human serum albumin onto glassy carbon rotating disc electrode
M.M. De Ficquelmont-Loïzos, H. Takenouti and W. Kanté 129

Impedance studies of the effects of solvent chemistry and solvent exchange on aged gels
M.W. Breiter, H. Durakpasa and B. Dunn 141

Anion adsorption from sulfuric acid solutions on Pt(111) single crystal electrodes
A.M. Funtikov, U. Stimming and R. Vogel 147

Porous electrodes in the presence of a concentration gradient
A. Lasia 155

Anionic clay modified electrodes: electron transfer mediated by electroactive nickel, cobalt or manganese sites in layered double hydroxide films
J. Qiu and G. Villemure 165

Application of a current–time function of the form $I(t) = I_0 t^{\omega}$, $\omega \geq -1/2$ to hemispherical microelectrodes
A. Molina and J. González 173

Electrochemical and ellipsometric studies of polyaniline films grown under cycling conditions
C.M.G.S. Cruz and E.A. Ticianelli 185

Announcement 193

Author Index 195

Subject Index 197

The table of contents of the Journal of Electroanalytical Chemistry is included in ESTOC – Elsevier Science Tables of Contents services – which can be accessed on the World Wide Web at the following URLs:
http://www.elsevier.nl/locate/estoc or http://www.elsevier.com/locate/estoc

US mailing notice—*The journal of Electroanalytical Chemistry* (ISSN 0022-0728) is published three weekly by Elsevier Science S.A. (P.O. Box 564, CH-1001 Lausanne). Annual subscription price in the USA is US$ 5069.00 (valid in North, Central and South America), including air speed delivery. Application to mail at second class postage rate is pending at Jamaica, NY 11431.
USA POSTMASTERS: Send address changes to the *Journal of Electroanalytical Chemistry*. Publications Expediting, Inc., 200 Meacham Avenue, Elmont, NY 11003.
AIRFREIGHT AND MAILING in the USA by Publication Expediting, Inc., 200 Meacham Avenue, Elmont, NY 11003.
Advertising information: Advertising orders and enquiries may be sent to: **International:** Elsevier Science, Advertising Department, The Boulevard, Langford Lane, Kidlington, Oxford OX5 1GB, UK, Tel: +44 1865 843565; fax: +44 1865 843976. **USA and Canada:** Weston Media Associates, Daniel Lipner, P.O. Box 1110, Greens Farms, CT 06436-1110, USA, Tel: +1 203 261 2500; fax: +1 203 261 0101. **Japan:** Elsevier Science Japan, Marketing Services, 1-9-15 Higashi-Azabu, Minato-ku, Tokyo 106, Japan, Tel: +81 3 5561 5033, fax: +81 3 5561 5047.